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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/627,567

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Kuen-Dong Ha

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03/31/2005

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EXAMINER

GUHARAY, KARABI

ART UNIT

PAPER NUMBER

2879

DATE MAILED: 03/31/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/627,567

Applicant(s)

HA ET AL.

Examiner

Karabi Guharay

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-19 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1-6, 9-15, 18 and 19 is/are rejected.
- 7) ☒ Claim(s) 7, 8, 16 and 17 is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 24 July 2003 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. ____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date 7/24/03 & 11/20/03.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. ____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: ____.

Priority

Receipt is acknowledged of papers submitted under 35 U.S.C. 119(a)-(d), which papers have been placed of record in the file.

Specification

The disclosure is objected to because of the following informalities:

(1) On line 18 of page 8, Fig 2 should be changed to Fig 1 & 2, since following description of reference numerals occurs in both Fig 1 and Fig 2.

(2) On line 20, "Fig 2A" should be changed to FIG 2, since there is no Fig 2A.

(3) On page 14, in the table 1, " \square " should be properly defined in each case.

Appropriate corrections are required.

Specification

The specification is objected to as failing to provide proper antecedent basis for the claimed subject matter. See 37 CFR 1.75(d)(1) and MPEP § 608.01(o). Correction of the following is required: Regarding claims 11-19, claimed subject matter of "angle θ_1 is greater than the angle θ_2 " is not described in specification.

Drawings

The drawings are objected to under 37 CFR 1.83(a). The drawings must show every feature of the invention specified in the claims. Therefore, feature "the angle θ_1 is greater than the angle θ_2 " claimed in claims 11-19 must be shown or the feature(s) canceled from the claim(s). No new matter should be entered.

Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended

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replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. The figure or figure number of an amended drawing should not be labeled as "amended." If a drawing figure is to be canceled, the appropriate figure must be removed from the replacement sheet, and where necessary, the remaining figures must be renumbered and appropriate changes made to the brief description of the several views of the drawings for consistency. Additional replacement sheets may be necessary to show the renumbering of the remaining figures. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either "Replacement Sheet" or "New Sheet" pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

Claim Rejections - 35 USC § 112

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claim 19 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Since angle θ_1 is greater than the angle θ_2 (as claimed in claim 11) and θ_1 is less than or equal to 45 degree, while θ_2 can be greater than 45 upto 70 degree, which renders the claim indefinite.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1-6, 9-15 & 18-19 are rejected under 35 U.S.C. 102(b) as being anticipated by Hasegawa (JP 11-219664).

Regarding claim 1, Hasegawa discloses a cathode ray tube (1 of Fig 9) including a color selection apparatus (3) mounted between a phosphor screen (2) and an electron gun (6) installed within a vacuum tube assembly of the cathode ray tube (paragraph 0002) and one or more support members (10, of Fig 10) for supporting the color selection apparatus (3) in the vacuum tube assembly (paragraph 0003-0004 of English translation copy), each of the one or more support members (20 of Fig 1, Fig 2, Fig 4 & Fig 6) being formed by a spring (line 1 of paragraph 0009) comprising a fixed section (weld zone 21) secured to the color selection apparatus (see Fig 3), a locking section (stop section 22) connected to the vacuum assembly and a center section connected to the vacuum (intermediate section 23, between 24 and 24a) formed between the fixed section (21) and the locking section (22) wherein the fixed section and the center section are separated by and bent at a first folding trace (24 of Fig 1b), and the center section and the locking section are separated by and bent at a second folding trace (24a), wherein an angle θ formed between the first folding line (24 at the beginning of intermediate portion,) and a straight line drawn on the fixed section along the direction

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of the width of the support member 20 (direction A, shown in Fig 1a) and the second folding trace (24a) has an angle θ' (shown in Fig 1a) with a straight line drawn on the center portion along direction X (in this case, direction A, which is along the width of the spring 20), angle θ' is greater than angle θ (see Fig 6b, & paragraph 0036).

Regarding claim 2, Haegawa discloses that the direction of bend between fixed section and the center section is opposite to the direction of bent between the center section and the locking section (see Fig 1b & Fig 3).

Regarding claims 3 & 4, Hasegawa discloses that the one or more support member (10 or 20) further comprises a holder (9) that is welded to the color selection apparatus and to the corresponding fixed section (Fig 10).

Regarding claim 5, Hasegawa discloses that the first folding trace (24) is formed to the outside of areas (26) of the support member making contact with the holder (9, see Fig 3)

Regarding claim 6, Hasegawa discloses that a connecting hole (25) is formed on the locking section (22) and the connecting hole is secured to a stud pin (12) mounted to an inner surface of the panel of the vacuum tube assembly (Fig 1a & Fig 10, paragraph 0031).

Regarding claim 9, Hasegawa discloses that the angle θ_1 is equal to 45° (see Fig 1a, and Fig 6b).

Regarding claim 10, Hasegawa discloses that angle θ_2 is greater than 45° , thus satisfy the claimed relation (see Fig 6b).

Regarding claim 11, Hasegawa discloses a support members (20 of Fig 1, Fig 2, Fig 4 & Fig 6) being formed by a spring (line 1 of paragraph 0009) comprising a fixed section (weld zone 21) secured to the color selection apparatus (see Fig 3), a locking section (stop section 22) connected to the vacuum assembly and a center section connected to the vacuum (intermediate section 23, between 24 and 24a) formed between the fixed section (21) and the locking section (22) wherein the fixed section and the center section are separated by and bent at a first folding trace (24 of Fig 1b), and the center section and the locking section are separated by and bent at a second folding trace (24a), wherein an angle θ formed between the first folding line (24 at the beginning of intermediate portion,) and a straight line drawn on the fixed section along the direction of the width of the support member 20 (direction A, shown in Fig 1a) and the second folding trace (24a) has an angle θ' (shown in Fig 1a) with a straight line drawn on the center portion along direction X (in this case, direction A, which is along the width of the spring 20), angle θ is greater than angle θ' (see Fig 1a, & paragraph 0020).

Regarding claim 12, Haegawa discloses that the direction of bend between fixed section and the center section is opposite to the direction of bent between the center section and the locking section (see Fig 1b & Fig 3).

Regarding claims 13 & 14, Hasegawa discloses that the one or more support member (10 or 20) further comprises a holder (9) that is welded to the color selection apparatus and to the corresponding fixed section (Fig 10).

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Regarding claim 15, Hasegawa discloses that a connecting hole (25) is formed on the locking section (22) and the connecting hole is secured to a stud pin (12) mounted to an inner surface of the panel of the vacuum tube assembly (Fig 1a & Fig 10).

Regarding claim 18, Hasegawa discloses that the angle θ_1 is equal to 45° (see Fig 1a, and Fig 6b, paragraph 0019).

Regarding claim 19, Hasegawa discloses that angle θ_2 is greater than 45° , thus satisfy the claimed relation (see Fig 6b).

Allowable Subject Matter

Claims 7-8 & 16-17 objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Regarding claims 7-8 & 16-17, the prior art of record neither shows nor suggests a support member for supporting a color selection apparatus comprising all the limitation particularly the limitations set forth in claims 7-8 & 16-17.

Other Prior Art Cited

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure : Baek (US 6700318); Morrell (US 3803436); Takano et al. (US 6288480).

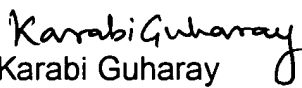
Contact Information

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Karabi Guharay whose telephone number is (571) 272-2452. The examiner can normally be reached on Monday-Friday 8:30 am - 5:00 pm.

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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Nimeshkumar D. Patel can be reached on (571) 272-2457. The fax phone number for the organization is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).


Karabi Guharay
Patent Examiner
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